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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,860	01/21/2005	Gerardus Rudolph Langereis	NL 020735	2388
24737	7590	04/05/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			NGUYEN, LINH THI	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/521,860	Applicant(s) LANGEREIS ET AL.	
	Examiner Linh T. Nguyen	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to label the blocks on Fig. 3 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being unpatentable by Sunagawa (US Patent 6442119).

In regards to claims 1 and 6, Sunagawa discloses a method and device of recording information on an optical record carrier, where optically readable marks are formed on the optical record carrier by recording pulses applied to a recording surface of the optical record carrier at a recording power level of an irradiation beam (Column 3, lines 57-62), and where optically readable lands are formed by intervals between the recording pulses at a bias power level of the irradiation beam (Column 3, lines 62-65; Fig. 10); where during a recording process the bias power level (Column 4, lines 38-44) is set at a reading power level to read pre-recorded information written on the optical record carrier characterized in that the reading power level is determined by at least one of the parameters: the recording power level and recording speed (Column 4, lines 55-61).

In regards to claims 2 and 8, Sunagawa discloses a method and device, where the reading power level $P_{\text{sub.read}}$ is determined by an equation $P_{\text{sub.read}} = k \cdot P_{\text{sub.rec}}$ where k is a multiplication constant and $P_{\text{sub.rec}}$ is the recording power level (Column 6, lines 62-67 and Column 7 lines 1-3).

In regards to claims 3 and 9, Sunagawa discloses a method and device, wherein the multiplication constant k is in the range from 0.02 to 0.2 (Column 6, lines 57-60).

In regards to claim 7, Sunagawa discloses a device as claimed in claim 6, comprising storage means for storing a formula for determining the reading power level in dependence with at least one of the parameters: the recording power level and recording speed (Column 4, lines 55-61).

In regards to claim 12, Sunagawa discloses an optical recording carrier susceptible for forming a pattern of optically readable marks and lands by an irradiation beam (Fig. 10), comprising a substrate, control information, an information recording area, where the information recording area includes pre-recorded information (Column 3, lines 17-32), characterized in that the control information includes a formula for determining a reading power level of the irradiation beam for reading the pre-recorded information during a recording process, where the reading power level is determined by at least one of the parameters: recording power level and recording speed (Column 4, lines 55-61).

In regards to claim 13, Sunagawa discloses an optical recording carrier as claimed in claim 12, where the pre-recorded information is stored in a periodic track modulation of the information recording area (Column 3, lines 18-25).

In regards to claim 14, Sunagawa discloses an optical recording carrier as claimed in claim 13, where the frequency of the periodic track modulation is modulated with a digital position-information signal (Column 3, lines 18-25).

In regards to claim 15, Sunagawa discloses an optical recording carrier as claimed in claim 12, where the control information on the substrate comprises a multiplication constant k such that $P_{\text{sub.read}} = k \cdot P_{\text{sub.rec}}$, where $P_{\text{sub.rec}}$ is the recording power level and $P_{\text{sub.read}}$ is the reading power level (Column 6, lines 62-67 and Column 7 lines 1-3).

In regards to claim 16, Sunagawa discloses an optical recording carrier of claim 15, where the multiplication constant k is in the range from 0.02 to 0.2 (Column 6, lines 57-60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunagawa in view of Ahn et al (US Publication 2003/0218954). For description of Sunagawa see the rejection, supra.

In regards to claims 4 and 10, Sunagawa does not but Ahn et al discloses a method and device, where the bias power level of the intervals between the recording pulses is first set at a cooling power level and then at the reading power level, where the cooling power level is below the reading power level (Fig. 6b; T_{cl} =cooling power to P_e =erase power; Erase power is also equivalent to reading power see Paragraph [0085], lines 6-8, where $P_{b1} = .7\text{mW}$, which is within the reading power because the Sunagawa also set the reading power to $.7\text{mW}$ see column 4, lines 38-40). At the time of the invention it would have been obvious to a person of ordinary skill in the art to add Sunagawa recording device to having a cooling power level below the reading power (erase power) as taught by Ahn et al. The motivation for doing so would have been to prevent the disk from degradation and the mark form being distorted (Paragraph [0012]).

In regards to claims 5 and 11, Sunagawa does not but Ahn et al discloses a method and device, where the bias power level of the intervals for forming the shortest lands is set at a cooling power level (Fig. 6b; T_{cl}), and where the bias power level of the intervals for forming longer lands is first set at the cooling power level and then at the reading power level (Fig. 6b); where time length of the lands, expressed in the time length of one period of a reference clock (T) in a data signal, is determined by a run-length-limited code sequence (Paragraph [0062], lines 3-8).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN
March 29, 2006


ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER